

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of)	
Amendment of Part 73 of the)	
Commission's Rules to Permit)	Docket No.: MM DOCKET NO. 99-325
The Introduction of Digital Audio)	
Broadcasting in the AM)	
And FM Broadcast Services)	

REPLY COMMENTS of John Pavlica, Jr.

I am an electrical engineer, a licensed active amateur radio operator, and a loyal broadcast radio listener. I respectfully submit my comments in reply to comments made by both my colleges and by various organizations regarding digital broadcasting on the AM and FM bands in the USA.

I want to make just three main points in reply to comments recently filed by others.

Item 1: NO AM IBOC (HD Radio) should be allowed, day OR night on the AM broadcast band.

Item 2: Multicasting channel of FM IBOC / HD should be limited to simulcasting of LOCAL AM broadcast stations ONLY.

Item 3: Any new broadcast receiver offering IBOC/HD for the FM band shall be REQUIRED to meet AMAX stereo and enhanced minimum receiver standards on the AM band portion.

Regarding Item 1: From an engineering standpoint, I would have to agree with Leonard R. Kahn, P.E. and his Comments of 07/06/05. Mr. Kahn has a valid analogy of the wide bandwidth interference inherent in the IBOC/HD broadcasting scheme on the AM broadcasting band. I too agree that the IBOC/HD broadcasting plan should be scrapped on the AM band. I also believe that in the interest of national security, the AM band should remain primarily analog and methods that would increase adjacent channel interference (such as IBOC/HD) should be abolished. Instead, AM stations wishing audio improvements would be best serviced by their programming being simulcast on the multicast channel of FM IBOC/HD stations, AND the by the implementation of receiver standards requiring high quality AM on ALL FM IBOC/HD receivers. I disagree with Comments from Crawford Broadcasting and Walt Disney Company-ABC that IBOC/HD be permitted at night – this is not feasible due to skywave conditions at night. I suggest IBOC/HD be scrapped – both day and night and instead Items 2 and 3 be implemented - immediately.

Regarding Item 2: National Public Radio (NPR) may have plans for the multicasting channel of FM IBOC/HD (Tomorrow Radio) but I have a better plan TODAY. My plan is in order to give an all-digital technical ‘edge’ to existing AM broadcasters, I believe that the MULTICASTING channel function of FM IBOC/HD stations should be limited to ONLY retransmission / simulcasting of an

existing LOCAL AM broadcasting station. This will permit a natural evolution of digital broadcasting for existing AM stations – however; FM broadcasters should be encouraged to transmit their AM station’s programming at as high of a bit-rate as possible for the best digital audio quality and not less than 64bit. I do not believe that the simulcast channel of FM IBOC/HD stations should be permitted to broadcast anything but existing LOCAL AM stations for the first 10 years of this authority. The only exception would be for educational / non-commercial stations (such as NPR) which could use their IBOC / HD multicasting as they see fit for educational purposes. Existing analog FM SCA can remain as-is.

Regarding Item 3: Mr. Darwin Long’s comments suggest the FCC “...consider an alternative digital system that is less flawed (such as Cam-D), or to enhance and provide incentives for stations to return to analog AM stereo broadcasting (and allow both the C-QuAM and ISB systems for different signal and time of day situations)...” is an excellent proposal in my opinion. The FCC should mandate minimum AM receiver standards (as previously submitted by broadcast engineer Mr. Scott Todd). Taking Mr. Long’s comments further, I suggest that any IBOC/HD FM radio tuner/receiver requesting FCC type acceptance be required to meet or exceed minimum “enhanced AM” receiver standards. These AM receiver standards should include: AMAX bandwidth of 7.5KHz or greater, third-generation C-Quam stereo AM decoding, digital noise blanking, automatic bandwidth control, data, as well as the ability to receive the heritage ISB or Cam-D stereo AM broadcasts. The key to a healthy AM broadcast band is mandating decent AM receivers, encouraging broadcasters to return to a full 10,200 Hz analog frequency response (or CAM-D) and stereo broadcasts (C-Quam, ISB or CAM-D), all while maintaining the NRSC mask for adjacent channel interference. These newly mandated AM radios could easily and automatically switch

from C-Quam stereo during the day to ISB or CAM-D at night for seamless high-quality AM stereo audio. Data should include EAS text messages, weather warnings as well as artist and song title information.

In summary:

1: NO IBOC / HD radio on the AM broadcast band - PERIOD...but instead:

2: AM stations get 'first dibs' on ALL (non-NPR) FM IBOC/HD simulcasting – and nobody else.

3: Receiver manufacturers producing FM IBOC / HD tuners MUST include and meet or exceed enhanced AM tuner standards, including noise blanking, stereo, and improved bandwidth.

Last, but not least, I urge the FCC to act upon all three of my issues and issue a rule-making before the end of 2005 according to my reply to comments.

As always, I thank you for allowing me to voice my opinions and suggestions.

Respectfully submitted,

John Pavlica, Jr.